

**REVIEW OF THE INTEGRATED SUBMISSION  
AND REMITTANCE PROCESSING (ISRP)  
SYSTEM SOFTWARE DEVELOPMENT AND  
PILOT ACTIVITIES**

**Reference No. 090903 Date: November 6, 1998**

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System Software Development and Pilot Activities**

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## **Executive Summary**

On August 22, 1996, the Service's Investment Review Board (IRB) approved the initial Business Case to replace the existing Distributed Input System (DIS) and the Remittance Processing System (RPS). The project was later named the Integrated Submission and Remittance Processing (ISRP) system. Replacement of legacy DIS and RPS, the primary data input systems for processing paper submissions, with ISRP is critical. The legacy systems are 13 and 20 years old respectively, and neither is capable of processing dates beyond the year 1999.

On January 30, 1998, we issued a report on the Initial System Development Activities of the ISRP system (Report #082204), identifying the aggressive rollout schedule, the absence of contingency plans, and increased development risk for the Residual Remittance Processing System (RRPS) functionality. In this review, we assessed the decisions and activities regarding the design, development, and installation of the ISRP pilot system to determine if they were complete and reliable.

The ISRP systems development project is one of four critical Information Systems projects monitored monthly by the Commissioner's Year 2000 Executive Steering Committee. We initiated our review based on the Service's mission critical need for a year 2000 compliant system to process the taxpayer's paper submissions. The audit was performed in accordance with generally accepted government auditing standards. We plan to continue to evaluate the system rollout in future audits.

## **Results**

The pilot produced mixed results and risks remain for successful implementation of a nationwide production system. From the start-up of the pilot on February 9, 1998, through June 30, 1998, the pilot processed 4.1 million tax returns and 2.3 million payments. Although not all functionality was delivered, tested, or working at the inception of the pilot, management reported that the Austin Service Center (AUSC) did meet both the April deposit program completion date (PCD) and May other-than-full-paid individual tax return PCD. However, the RRPS did not demonstrate consistent reliability as a production system, and neither ISRP subsystem conclusively demonstrated anticipated productivity gains.

Management appropriately elected to mitigate the risk associated with a nationwide rollout by limiting the RRPS rollout for the 1999 processing year to five additional service centers. We concur with management's actions to control risks associated with

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the nationwide rollout. However, there are additional system design, project scheduling and resource allocation risks, which management must also continue to monitor and address to ensure successful nationwide implementation before January 1, 2000.

### **System Design Risks**

Software development and hardware configuration issues affect the stability of the RRPS and its ability to meet all contractual and operational production requirements. (See page 5 for details.)

As of the Preliminary Pilot Review, the Service had not yet accepted the ISRP pilot system because it had not meet the contract's 99 percent effectiveness requirement and RRPS remittance processing requirements.

- Through June 30, 1998, the Austin Service Center (AUSC) was unable to consistently meet the Service's minimum deposit standards while the RRPS pilot was its primary deposit system.

Work process changes to accommodate incompatible enhancements increase the project's non-technical system design risk. For example:

- RRPS transaction processing changes circumvent legacy RPS Unpostable controls which prevent the issuance of erroneous balance due notices and the release of erroneous refunds. To determine the potential effect of this condition, we reviewed over 90,000 reversed payment transactions not processed through legacy RPS. Our analysis showed that this legacy control would have prevented over 19,000 erroneous refunds and 53,000 erroneous notices from generating. (See page 8 for details.)
- Preliminary data indicates that re-engineered RRPS work processes have affected the productivity of some downstream functions. During pilot operations, downstream units, such as ERS, Rejects, Unpostable and Unidentified Remittances, experienced lower than expected production rates, increases in their overage inventories, and/or increases in their overall inventories. We will continue to evaluate the effects of ISRP re-engineered work processes on these units in future audits. (See page 11 for details.)

Once programming changes for all non-RPS processed remittances are made, we will follow up to quantify the number of taxpayers who would have received erroneous notices and /or refunds. Management plans to implement a partial corrective action for the 1999 processing season. We plan to follow-up and review the effectiveness of this corrective action.

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### **Project Scheduling Risks**

The project office's strong configuration management controls have proactively identified and/or mitigated many of the project's scheduling risks, such as the effect of contractor delivery delays on system testing activities. However, continued delays in software delivery by the contractor require management to continue its strong executive oversight to ensure that the system is adequately developed and tested prior to the final nationwide implementation. (See page 13 for details.)

### **Resource Allocation Risks**

Productivity gains established in the project's initial business case were the basis for projected labor savings and comprise approximately 34 percent of the overall benefit of the Service's investment in the ISRP system. Since the projected benefits of major information technology investments are closely integrated into the Service's financial planning and budgeting activities, it is important that the Service evaluate the productivity gains of ISRP operations closely during the 1999 filing season. (See page 16 for details.)

To provide management with assessments of the project's system development risks and recommendations to mitigate those risks, we issued Internal Audit Memorandums on the interim results of our review. While management did not always agree with our assessments and conclusions, they took or initiated appropriate corrective actions to most of our recommendations. As a result, we have not restated all of our recommendations in this report. Instead, we have highlighted the risks which management must continue to mitigate to ensure a successful implementation. Because this was an on-line audit, the recommendations, which were not immediately addressed, were subsequently resolved or acknowledged by management during pilot operations. Copies of management's responses to our memorandums are included as Attachments IV, V, and VI. We will continue to provide audit coverage as the ISRP implementation progresses.

## **Introduction**

The Integrated Submission and Remittance Processing (ISRP) systems development project is one of four critical Information Systems projects monitored monthly by the Commissioner's Year 2000 Executive Steering Committee. We initiated the review based on the Service's mission critical need for a year 2000 compliant system to process the taxpayer's paper submissions. The audit was performed in accordance with generally accepted government auditing standards.

## **Objectives and Scope**

*We conducted the review to determine if critical project development decisions and activities were adequate to ensure a successful nationwide rollout.*

The overall objective of this audit was to determine if the decisions and activities regarding the design, development, and installation of the ISRP systems were complete and reliable. We concentrated our audit tests on:

- Reviewing the project's Increment I software development.
- Assessing the pilot system's implementation.

We conducted audit work from November 4, 1997, through June 30, 1998, at the National Office and the Austin Service Center (AUSC), which hosted the ISRP pilot. Details of our audit objectives and scope of review are presented in Attachment I.

## **Background**

On August 22, 1996, the Service's Investment Review Board (IRB) approved the initial Business Case to replace the existing Distributed Input System (DIS) and the Remittance Processing System (RPS). These systems are the Service's core components for paper return and payment input processing. The systems

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*Replacement of legacy DIS and RPS with ISRP is critical to the mission of the Service since neither is capable of processing dates beyond the year 1999.*

handle up to 170 million paper returns and 50 million paper remittances per year.

On December 4, 1996, the IRB approved the project's acquisition strategy, established the DIS/RPS Replacement Project Office, and authorized the project's immediate funding requirements. The combined replacement system was later named the Integrated Submission and Remittance Processing (ISRP) system. See Attachment II for a chronology of key pre-pilot development milestones.

Replacement of legacy DIS and RPS with ISRP is critical to the mission of the Service since they are the primary data input systems for processing paper submissions. The legacy DIS and RPS are 13 and 20 years old respectively, and neither is capable of processing dates beyond the year 1999. Both have outlived their originally designed system life. For these reasons it is incumbent on the Service to fully test and ensure the reliability of the ISRP system prior to nationwide installation and year 2000 operations.

The replacement plan began on December 20, 1996, and scheduled the development of the system in two increments with the completion of the nationwide rollout by January 1, 1999. Increment 1 technical requirements include all RPS functionality and the DIS applications for Forms 1040 family, 940, and 1120S. All other form specific DIS applications were scheduled for delivery in Increment 2.

To accommodate the aggressive schedule in a very condensed development period, the design and build stages of the project have run concurrently and the prototype stage for the RPS replacement was omitted. As a result, the project's original statement of work has required numerous revisions because functional requirements were omitted.

To better manage these configuration changes, minimize cost increases, and facilitate formal communications with the contractor, the Service established an ISRP Configuration Control Board (CCB) as a single point of

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authority for system design changes. The CCB is comprised of representatives from Information Systems, Operations, Acquisition and Procurement, as well as, the Contractor. Through the configuration management of the CCB, the Service and the contractor have bilaterally agreed to and definitized the statement of work.

On January 30, 1998, we released a report on the Initial System Development Activities of the ISRP system (Report #082204), identifying the aggressive rollout schedule, absence of contingency plans, and increased development risk for the Residual Remittance Processing System (RRPS) functionality. The report's recommendations included the re-assessment of RPS enhancements (e.g. digital imaging, image retrieval, and image archiving) and the development of contingency plans should the system not be ready for nationwide rollout. Management agreed with these recommendations and implemented contingency planning. They also tasked an independent contractor to study the ISRP Image Storage and Retrieval Subsystem, but the results of this study were not available prior to the start-up of pilot operations and are not yet complete.

### Results

*Risks remain for successful implementation of a nationwide production system.*

The pilot produced mixed results and risks remain for successful implementation of a nationwide production system. From start-up on February 9, 1998, through June 30, 1998, the pilot processed 4.1 million tax returns and 2.3 million payments. Although not all functionality was delivered, tested, or working at the inception of the pilot, management reported that AISC met both the April deposit program completion date (PCD) and May other-than-full-paid (OTFP) individual tax return processing PCD. However, the Business Case projected that the DIS and RRPS portions of ISRP would produce a minimum of 10 percent and 25 percent productivity gains over legacy operations, respectively. The RRPS has not yet demonstrated consistent reliability as a production system, and neither ISRP



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subsystem conclusively demonstrated these gains during AUSC pilot operations. (See Attachment III for an analysis of the pilot production results.)

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### **Management appropriately elected to mitigate risk by implementing contingency plans.**

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*We concur with management's decision to mitigate risk by curtailing the nationwide rollout of RRPS and implementing contingency plans for the careful removal of legacy DIS equipment.*

Because the ISRP RRPS functionality did not fully meet expectations, management appropriately elected to mitigate the risk associated with a nationwide rollout by limiting the RRPS rollout for the 1999 processing year to five additional service centers. The ISRP DIS will roll out to all sites for the 1999 processing year.

- The five centers were selected for RRPS rollout because of their ability to maintain a large majority of the legacy RPS equipment after the RRPS equipment has been installed.
- The risk potential associated with the nationwide rollout of ISRP DIS is minimal because the ISRP DIS system remained stable throughout the pilot and all service centers have the capability to leave significant portions of their legacy DIS equipment up and running. Management also implemented a contingency plan to carefully remove legacy DIS equipment so that it can be reinstalled if necessary.

*No specific recommendations are included in this report since we have either previously reported the recommendation to management or they are aware of the condition and are working to address it.*

We concur with management's actions to control risks associated with the nationwide rollout. However, there are additional risks which management must also continue to monitor and address to ensure successful implementation before January 1, 2000. Many of these risks were discussed in Internal Audit memorandums issued throughout the review.

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### **System Design Risks**

- Software development and hardware configuration.
- Internal controls for Master File processing.
- Downstream impact on interrelated functions.

### **Project Scheduling Risks**

- Time allocation for system testing activities.
- Implementation of contingency plans.

### **Resource Allocation Risks**

- Productivity effects on Submission Processing budgets.

## **System Design Risks**

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### **The current ISRP system configuration has not yet demonstrated overall systemic stability.**

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On May 18, 1998, we reported our concerns that the RRPS functionality had not yet demonstrated processing reliability. Specifically, the RRPS pilot at AUSC:

- Had not yet demonstrated systemic stability.
- Had not met all production requirements.
- Had shown that the image archive database was unreliable.

**Management Comment:** Management agreed with our assessment of the image archive system and acknowledged that the RRPS had experienced several systemic problems during Systems Acceptability Tests (SAT) and AUSC pilot operation. They responded that since the last week of April 1998, RRPS remained stabilized and functioned well throughout the period of

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peak processing. Also, AUSC was provided latitude in the area of deposit requirements since the primary purpose of the pilot was to test the system as much as possible.

Throughout pilot operations, the ISRP project office has implemented strong configuration management controls. These controls include conducting incremental development reviews and requiring the resolution of the most critical risks before continuing into the next system development phase. **While continuing to control system development, management must also ensure the following problems/risks are addressed before the ISRP system is fully implemented nationwide:**

### **Account for and resolve all problem reports.**

*Numerous problem reports remain open and unresolved.*

RRPS experienced problems posting transaction data to the Master File and numerous production interruptions throughout pilot operations. AUSC continues to generate trouble tickets regarding the operations of the RRPS.

- The March 31, 1998, and April 25, 1998, open trouble ticket reports reveal a total of 19 RRPS problems referring to work stoppages, unexpected system shutdowns, and/or forced system shutdowns due to system lock-ups.
- From May 1 through July 17, 1998, AUSC created 63 new RRPS trouble tickets -10 of which indicated that a key component of RRPS was inoperable.

### **Ensure that the ISRP system meets all contractual and operational production requirements.**

*RRPS operational problems have continued to occur even after the IMF peak processing season.*

On May 6, 1998, the ISRP project office reported that the Service had not yet accepted the ISRP system because:

- The ISRP system did not meet the contractual requirement of 99 percent effectiveness during the initial 30-day test period.

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- The RRPS remittance transport system did not satisfy the contractual requirement to process 117,000 remittances through the original entry and key verification (OE/KV) process and 13,000 remittances as scanable vouchers over two 10-hour shifts.

While RRPS was the service center's primary deposit system, AUSC was unable to consistently meet the Service's minimum deposit standards. Specifically:

- AUSC did not meet the 90 percent monthly average deposit rule during March, April, or May of 1998.
- AUSC did not meet the 90 percent next day deposit requirement 50 of the 84 days RRPS was operational from March 1 through June 30, 1998.

### **Ensure the reliability of the image archive sub-system.**

*The image archive subsystem is unstable.*

To assess the overall stability of RRPS, the performance of all of its sub-systems must be considered. On May 18, 1998, we reported that:

- The Image Archive Database was incomplete. The image data for 19,530 (approximately 5.6 percent) of the 350,000 remittance transactions processed through RRPS from February 17, 1998, to April 6, 1998, had not been stored.
- As of May 2, 1998, 17 percent of the open trouble tickets related to image archive problems.
- Since the beginning of RRPS pilot operations, the contractor had installed at least six emergency software patches (E-fixes) relating to archive functionality.
- Although not specified in the original contract, stager operations were periodically re-directed to other terminals in order to improve the processing of RRPS images. The migration of these operations was a temporary work around which limited the terminals' ability to perform their normal operations.

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Since completing the IMF peak deposit season, AUSC has generated additional trouble tickets regarding the operations of the RRPS image archive sub-system.

At the conclusion of the May 6, 1998, Preliminary Pilot Review, management identified 10 critical issues impacting the rollout decision. These ten issues were subsequently reported to the Service's Executive Steering Committee (ESC). At least five of these issues relate directly to RRPS operations; and on July 14, 1998, management reported to the Executive Steering Committee that the vendor had acknowledged reliability and stability problems regarding the RRPS image archive sub-system.

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### **RRPS transaction processing changes circumvent legacy RPS Unpostable controls.**

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On February 4, 1998, we reported to management that work process changes required to accommodate the RRPS architecture would circumvent existing Unpostable controls designed to prevent the issuance of erroneous balance due notices and non-rebate refunds. Outstanding risks for erroneous notices and refunds are discussed below.

#### **Existing legacy controls ensure that remittance transactions are associated with their payment documents.**

*ISRP does not include existing legacy controls that prevent erroneous notices and refunds.*

When legacy RPS processes remittances received with a tax return, the corresponding transactions are coded with RPS indicators.

- Legacy RPS assigns the remittance transaction a RPS coded Document Locator Number (DLN) and prints a matching DLN on the tax return.
- Legacy DIS assigns the matching DLN to the return transaction and sets a RPS indicator within the return transaction record.

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The Individual Master File (IMF) Unpostable condition (UPC) 140 and Business Master File (BMF) UPC 399 are based upon the matching of the document locator numbers of returns and payments. These Unpostable conditions prohibit the posting of RPS coded returns unless a matching payment transaction has posted to the Master File. This control prevents:

- The issuance of erroneous balance due notices.
- The release of erroneous refunds created by taxpayer error.
- The release of erroneous non-rebate refunds created by processing errors or misapplied payments.

ISRP Residual Remittance Processing System (RRPS) transactions are similar to the remittance transactions processed through the Service's Lockbox program. Neither the Lockbox program nor ISRP RRPS supports the legacy RPS transaction coding process. The legacy DIS does not set the RPS indicator or assign a matching DLN to the returns with remittances processed through Lockbox banks. Similarly, the original procedures for transcribing returns with remittances processed through ISRP RRPS did not instruct data transcribers to set the RPS indicator.

*We determined that UPC 140/399 could have prevented over 19,340 erroneous refunds and 53,377 erroneous notice from generating.*

To determine the potential effect of this condition, we reviewed over 90,000 reversed payment transactions not processed through legacy RPS (i.e. Lockbox transactions) and determined that UPC 140/399 could have prevented over 19,340 erroneous refunds and 53,377 erroneous notices from generating.

The analysis revealed that 60 percent of the IMF cases reviewed (39,146 IMF tax modules) and 75 percent of the BMF cases reviewed (20,251 BMF tax modules) allowed a tax return to post along with a remittance transaction that was later reversed. Further analysis revealed that:

- UPC 140/399 controls could have prevented 19,340 erroneous refund transactions for approximately \$54 million dollars from generating.

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We also determined that approximately 66 percent of the cross-reference tax modules associated with reversed remittance transactions (affected tax modules) generated erroneous settlement notices during the time their payment was misapplied. Further analysis revealed that:

- Approximately 111 million dollars in IMF payments were applied to the wrong module or Taxpayer Identification Number (TIN), placing 38,583 taxpayer accounts in notice status for an erroneous balance due amount.
- Approximately 11 million dollars in BMF payments were applied to the wrong module or TIN, placing 14,794 taxpayer accounts in notice status for an erroneous balance due amount.

Management Comment: Management agreed with our finding and issued a request for information services (RIS Number TSF-8-0067) on February 25, 1998, to improve the controls over IMF Lockbox and ISRP transaction processing. Due to established work processes, the RIS does not include BMF transactions. Management has agreed that the BMF control weakness is significant and committed resources to develop the appropriate corrective actions.

In May 1998, part of the RIS was cancelled because of its effect on partially paid returns. As written, the RIS incorrectly rejected partially paid tax return transactions because the balance due amount did not match the remittance amount exactly and the transactions could not be associated by matching DLNs.

*Corrective actions for IMF accounts may not be completed until 2000, and the corrective actions for BMF accounts are still being developed.*

In a separate study, the Service's Non-Rebate Erroneous Refund Task Force determined that 78 percent of the non-rebate erroneous refund cases reviewed were caused by misapplied payments. In their draft report, the Task Force defined non-rebate erroneous refunds as ones resulting from a clerical or ministerial mistake, not from a redetermination of a taxpayer's liability.

The study's first recommendation was to expand UPC 140 to unpost a tax return transaction when the amount

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is less than a posted remittance and creates a credit balance of ten dollars or more. Operations has submitted a request for these programming changes (RIS number TFS-8-0153); but, due to resource limitations, the implementation of this RIS has been delayed until January 2000. Once implemented, this RIS will resolve the previous RIS's affect on partially paid returns but will still not address the weaknesses of the BMF controls (UPC 399).<sup>i</sup>

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### **Preliminary data indicates that re-engineered RRPS work processes have affected the productivity of some downstream functions.**

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In a document titled "Roadmap for ISRP Implementation," AUSC has prepared a clear and comprehensive synopsis of the ISRP pilot system performance, which warns other Service Centers not to underestimate the impact of the ISRP system on downstream functions. According to the Roadmap, the RRPS sub-system's lack of audit trails had the most significant impact on downstream functions.

Problems associated with the RRPS image archive sub-system and the disassociation of return and remittance DLN's have affected the productivity of various downstream functions. AUSC downstream units, such as ERS, Rejects, Unpostables and Unidentified Remittances, experienced lower than expected production rates, increases in their overage inventories, and/or increases in their overall inventories. For example:

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<sup>i</sup> During the last week of October 1998, Management advised us of their plan to expedite the development of this RIS and implement it prior to the 1999 processing season. As stated above, the full corrective action will not be completely implemented. We plan to evaluate the effectiveness of the RIS during future audits.



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**ERS Unit:** AISC BMF ERS inventory, which is normally processed within two days, reached as high as nine days old. Remittance images of 58 RRPS cases in this inventory were not available on the RRPS archive system.

**Rejects Units:** At various times during the filing season, the Rejects inventory was 2,000 cases above prior year levels, and the number of aged cases (those in excess of 60 days) increased by 200.

**Unpostable Units:** Problems with RRPS printers and missing images from the RRPS image archive contributed to a backlog of cases. On June 30, 1998, the unpostable inventory was up 60 percent over prior year levels.

**Unidentified Remittance Section:** Cases received from April 14 to June 12, 1998, were up 53 percent over the same period in 1997. The majority of the unresolved cases are 1040 payments for which source documents are not available. AISC reported that an inability to quickly resolve these types of cases increased the need for taxpayer correspondence.

For other units, such as Erroneous Refunds and Excess Collections, RRPS related cases may not be received for six months to a year after the transaction is processed. It is too early to assess the RRPS impact on the productivity of these downstream functions.

On July 14, 1998, management reported to the Service's Executive Steering Committee that these performance problems were not associated with identified ISRP requirements, and the issue was tabled until after the year 2000. In future audits, we will continue to evaluate the effects of ISRP re-engineered work process on downstream functions.

## **Project Scheduling Risks**

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### **Delays in Contractor Software Deliveries Impact Testing.**

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The ISRP Pilot began operations with unresolved system development problems. In preparation for the start-up of pilot operations, the ISRP project (including System Acceptability Testing) conducted over 1,000 tests to evaluate 714 allocated requirements. One week prior to start-up, 267 problem reports were outstanding. The contractor had unilaterally modified the number and content of software delivery drops. Delays in the contractor's delivery of software were responsible for Increment I problem reports.

At the January 30, 1998, Operational Readiness Review, management identified 22 of these open problem reports as high priority reports, requiring resolution prior to pilot start-up and directed the projects office's activities to resolve these issues. On February 4, 1998, Internal Audit advised management of additional risks associated with pilot start-up and made recommendations for testing activities to:

- Determine if the system could operate for an extended period of time without generating high priority errors.
- Consider testing ISRP data for Master File posting accuracy.

Although management did delay the posting of ISRP DIS transactions until test data was confirmed as accurately posted to Master File, they rejected our recommendations for "extended operation" tests and RRPS Master File posting accuracy tests.

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### **Contractor software deliveries delayed both Increment I and II testing activities.**

Five days prior to the scheduled receipt of nationwide rollout software (Increment III), the ISRP SAT team reported a total of 10 Priority I, 139 Priority II and 7 Priority III overage Increment II SAT Problem Reports (Forms 5534). They were also continuing to test ISRP Remittance Processing Increment I SAT problem reports.

On June 4, 1998, the contractor unilaterally extended Increment II software deliveries into 5 drops (Drops I - V), and a sixth drop (DROP VI) was added in July. In July, the SAT team reported that they would not be able to complete testing of Drops V and VI prior to the implementation of Increment II functionality on the AUSC pilot system. The contractor's proposed solution was to install Drop IV software functionality at AUSC so the pilot system could begin Increment II operations on August 3, 1998, as scheduled. According to SAT status reports, Drop IV software does not include Run Control Record (RCR) functionality, which will seriously impact the Service's ability to process General Purpose Programs (GPP) during the Increment II pilot. The contractor proposed the installation of the balance of Increment II functionality on August 15 and 16, 1998.

Based upon the number of open SAT Problem Definitions and the amount of regression testing that remained to be completed, the SAT team reported concerns regarding the ISRP interface-testing schedule. While the SAT team actively continued interface testing, the time available to process submission data through both the ISRP and the Generalized Mainline Framework (GMF) was severely constrained by the contractor's delivery of Increment II, Drops V and VI functionality and the need for further regression testing. SAT was unable to complete ISRP Increment II testing prior to the receipt of the software for the ISRP nationwide rollout; and as of August 29, 1998, they had not yet verified the GMF interface for Employee Plan Master File (EPMF)

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documents and had processed a limited amount of GPP documents.

### **Continued delays in software deliveries will impact the nationwide rollout.**

The SAT team is also concerned about the software delivery schedule for the nationwide rollout. The contractor has begun referring to the ISRP nationwide rollout as Increment III, to include Tax Year 1998 changes, security functionality, and image archive balance and audit functionality. According to the project's Master Schedule, SAT is to receive and begin testing the initial Tax Year 1998 changes prior to the installation of ISRP application software at the nationwide rollout sites.

On July 18, 1998, SAT reported that the contractor's schedule to deliver Increment III in three drops would hamper their ability to conduct interface testing with the other tax processing systems in sufficient time to detect and correct errors prior to production. On August 8, 1998, SAT reported that the contractor added a fourth drop of Increment III software for October 10, 1998, which would delay the completion of SAT testing activities until late November 1998.

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### **Management implemented contingency plans to mitigate the risks confronting the nationwide rollout.**

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*The proactive development of contingency plans allowed management to mitigate risks associated with the nationwide rollout of RRPS.*

Because the ISRP RRPS functionality did not fully meet expectations, management appropriately elected to limit the RRPS rollout for the 1999 processing year to five additional service centers. The ISRP DIS will roll out to all sites during 1998.

While mitigating much of the risk associated with a nationwide rollout, this action created additional risks associated with funding sources for the contingency options and project schedule modifications to accommodate a delayed installation of RRPS at the remaining four service centers. Through the proactive development of detailed risk mitigation work sheets required by the project's contingency plans, the Service is prepared to implement these activities.

## **Resource Allocation Risks**

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### **Estimated savings in FY 1999 and FY 2000 Submission Processing budgets were affected by optimistic ISRP pilot production results.**

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In a memorandum to the Commissioner dated June 11, 1998, the Chief Financial Officer's Financial Analysis Division presented estimated cost savings related to the effects of productivity gains from ISRP on the Submission Processing budgets. The estimate was based upon the 10 percent DIS and 25 percent RPS productivity gains documented in the ISRP project's business case.

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In our prior report on the Initial System Development Activities of the ISRP System (Report #082204), we determined that the project's business case did not have quantitative support for the projected productivity gains. We recommended that management design the pilot's evaluation plan to capture data to support the productivity gains for any individual segment of the system. Management agreed with our recommendations and responded accordingly.

In an Internal Audit Memorandum dated July 2, 1998, we advised the Chief Financial Officer that pilot productivity information presented to the Service's Executive Steering Committee (ESC) appeared very optimistic and incomplete. As a result, we recommended that the Service not include estimated ISRP productivity savings in the FY 1999 or FY 2000 budget projections until the AUSC pilot productivity information is complete and actual savings are determined. (See Attachment III for our complete analysis of the pilot results.) These findings were based upon our conclusions that:

- The pilot's RRPS productivity gain is approximately 80 percent lower than the business case estimate.
- If funding decisions are based upon the gains presented to the Commissioner, the Service's Submission Processing budget could be underfunded by as much as 9 million dollars in FY 1999 and 11.2 million dollars in FY 2000.

Management Comments: The CFO's office agreed that there is uncertainty about the actual ISRP pilot productivity results and revised the most recent projection to assume no productivity savings in FY 2000 from the RRPS component of ISRP. Because the pilot results did not produce any credible data to challenge the DIS productivity gains established in the project's original Business Case, they were obliged to maintain the 10 percent DIS productivity gains in their estimate.

Since the projected benefits of major information technology investments are closely integrated into the

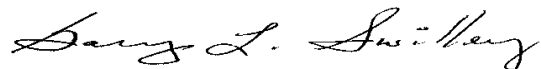
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Service's financial planning and budgeting activities, it is important that the Service evaluate the productivity gains of ISRP operations closely during the 1999 filing season. In a response to our memorandum, the Assistant Commissioner (Forms and Submission Processing) announced that during FY 1999, his office would retain and analyze comparative data between the pilot RRPS center and a center still processing on the Legacy RPS system to determine the productivity improvement for FY 2000.

### **Conclusion**

Management implemented strong system development and configuration management controls and is proceeding cautiously with the nationwide rollout. Despite these accomplishments, the Service needs to continue its strong executive oversight of the project's development and take additional actions to mitigate the remaining project development risks.



Audit Manager

## **Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities**

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### **Detailed Objectives and Scope of Review**

### **Attachment I**

- I. To determine the cause and assess the impact of modifications to the system's functionality and configuration, we:
  - A. Maintained an open and continuous dialogue with the ISRP project office.
  - B. Identified material modifications by reviewing Change Control Decisions (CCDs), development status reports, master schedules, and reports from third party consultants.
  - C. Determined the cause of material modifications according to the controls defined in the Services Systems Life Cycle Policy.
- II. To evaluate the effectiveness of the project's testing and certification activities, we:
  - A. Determined the amount of guidance and/or oversight provided to the project office in the development of the master test plan.
  - B. Evaluated the Increment I test plans and activities (i.e., Integration, SAT, Capacity, Security, etc.) for appropriate system development controls and allocated resources.
  - C. Measured the effectiveness and communication of testing and certification controls by tracing a randomly selected sample of test results.
  - D. Assessed the pilot system's readiness for processing taxpayer submissions.
  - E. Assessed the pilot system's readiness for nationwide rollout.
  - F. Monitored Increment II testing activities for completeness (i.e., inclusion of tests to cover all open or unresolved Increment I issues).
- III. To evaluate pilot operations for potential effects on the nationwide rollout, we:
  - A. Assessed the success of pilot site preparation.
  - B. Assessed the adequacy of system functionality during pilot operations.
  - C. Assessed the system's impact on downstream functions and post-ISRP transaction processing.
  - D. Quantified the impact of circumvented or eliminated legacy processing controls.
- IV. To follow-up on management's corrective actions to prior audit recommendations, we:
  - A. Reviewed the project's contingency planning process.
  - B. Monitored the project's modeling activities to validate production assumptions and system enhancements.



**Review of the Integrated Submission and Remittance Processing (ISRP)  
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**ISRP System Pre-Pilot Development Milestones**

**Attachment II**

Date:	Development Milestone:	Status/Comments:
August 22, 1996	The Investment Review Board (IRB) approved the initial Business Case to replace the existing Distributed Input System (DIS) and Remittance Processing System (RPS).	The project was latter named the Integrated Submission and Remittance Processing (ISRP) system.
November 14, 1996	The Chief Information Officer's (CIO) System Engineering Office released a DIS/RPS engineering design study.	Recommended replacement solutions for both DIS and RPS, with an aggressive development schedule to achieve rollout by January 1, 1999.  The study concluded that prompt executive decisions regarding the project acquisition strategy would reduce schedule risk.
December 4, 1996	The IRB approved the project's acquisition strategy and established the DIS/RPS Replacement Project Office.	The acquisition strategy was to develop the system within an existing Information Technology contract.
December 20, 1996	The Service selects Lockheed Martin Federal Systems (LMFS) as the contractor.	The project's statement of work will be submitted as a modification to the existing Document Processing System (DPS) contract, TIRNO-94-D-0028.
January 7, 1997	The Service established Integrated Product Teams (IPTs) to define system requirements.	IPTs are technical workgroups comprised of both contractor and IRS personnel.

**Review of the Integrated Submission and Remittance Processing (ISRP)  
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Date:	Development Milestone:	Status/Comments:
February 12, 1997	Inspection issued an Internal Audit Memorandum (IAM) to the:  Associate Commissioner for Modernization/Chief Information Officer IS	<b>Reported concerns:</b> <ul style="list-style-type: none"> <li>• Completeness of project's functional requirements.</li> <li>• Potential procurement risks.</li> </ul>
February 18, 1997	The Service conducts its initial field site survey at the Memphis Service Center (MSC)	Site surveys define local site preparation activities and establish local ISRP contacts at each Service Center.
February 26, 1997	Management submits the project's initial Statement of Work to the contractor as Contract Modification 164.	The system's technical and business requirements were presented to National Office and Field Representatives on February 13 and 20, 1997.
March 4, 1997	Austin Service Center (AUSC) is selected as the ISRP pilot site.	Rationale for selection includes building capacity, established infrastructure, and the existence of a remote processing facility.
March 18, 1997	Inspection issued an Internal Audit Memorandum (IAM) to the:  Associate Commissioner for Modernization/Chief Information Officer IS  Chief Taxpayer Service/Chief Compliance Officer T	<b>Reported concerns:</b> <ul style="list-style-type: none"> <li>• Risk of not completing rollout by mid-1999.</li> <li>• Complexity of combining the development of DIS and RPS replacements.</li> <li>• Omission of technical requirements from the statement of work.</li> <li>• Effect of the aggressive rollout schedule on local implementation.</li> <li>• Finalization of Submission Processing sites.</li> </ul>

**Review of the Integrated Submission and Remittance Processing (ISRP)  
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Date:	Development Milestone:	Status/Comments:
July 18, 1997	The contractor begins incremental deliveries of ISRP system software to the Program Development Site (PDS).	<p>Throughout the development of the pilot system, the project office conducted various testing activities, such as:</p> <ul style="list-style-type: none"> <li>• Requirements Verification Tests (RVT)</li> <li>• Integration Tests (IT)</li> <li>• Systems Acceptability Tests (SAT)</li> <li>• Security Certification Tests (SC)</li> <li>• Equipment Acceptance Tests (EAT)</li> <li>• Capacity and Performance Tests (CT)</li> </ul>
August 27, 1997	<p>Internal Audit issued its Draft Report on the “Initial Systems Development Activities of the ISRP System”</p> <p>The final report, including management's response, was issued on January 30, 1998 (Reference No. 082204).</p>	<p><b>Findings:</b></p> <ul style="list-style-type: none"> <li>• The project did not initially follow Systems Development Life Cycle standards.</li> <li>• Risks exist within the Project Development Strategy.</li> <li>• The contract’s statement of work needs modification because of omissions.</li> </ul>
October 21, 1997	The contractor certified that the AUSC and the San Antonio Remote Site met all requirements for the installation of Increment 1 of the pilot.	Hardware and incremental software deliveries to AUSC began on October 3, 1997.

**Review of the Integrated Submission and Remittance Processing (ISRP)  
System Software Development and Pilot Activities**

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Date:	Development Milestone:	Status/Comments:
October 29, 1997	<p>Inspection issued an IAM to the:</p> <p>Associate Commissioner for Modernization/Chief Information Officer IS</p> <p>Chief Taxpayer Service/Chief Compliance Officer CP</p> <p>Chief Management and Administration M</p>	<p><b>Reported concerns:</b></p> <ul style="list-style-type: none"> <li>• Contractor activity proceeds without a definitized contract.</li> <li>• The contractor's proposed re-use of DPS software and hardware has not materialized.</li> <li>• Adequacy of information supporting the IRB's approval of the project's acquisition and development strategies.</li> <li>• Effect of omitted systems development life cycle principles on the project's functional requirements.</li> </ul>
January 7, 1998	The Service and contractor sign Contract Modification (CM) 184.	CM 184 superceded previous contract modifications and definitized the project's statement of work.
January 30, 1998	The Service conducted an Operational Readiness Review (ORR) of the AUSC pilot system.	<p>The ISRP project office conducted over 1000 tests to evaluate 714 requirements.</p> <p>Management identified 22 of the 267 open problem reports as high priority reports requiring resolution prior to start-up.</p>

**Review of the Integrated Submission and Remittance Processing (ISRP)  
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Date:	Development Milestone:	Status/Comments:
February 5, 1998	<p>Inspection issued a draft IAM on the “operational readiness prior to processing live taxpayer data on the ISRP pilot system”</p> <p>On March 17, 1998, the final version of this IAM was issued to the:</p> <p>Associate Commissioner for Modernization/Chief Information Officer IS</p> <p>Chief Taxpayer Service/Chief Compliance Officer CP</p>	<p><b>Reported concerns:</b></p> <ul style="list-style-type: none"> <li>• Project development risk is higher for the Residual Remittance Processing System (RRPS) than for the Distributed Input System (DIS).</li> <li>• RRPS work process changes will circumvent existing Master File controls and increase the potential for taxpayer burden.</li> </ul>
February 9, 1998	ISRP DIS Pilot start-up.	AUSC begins processing tax returns through the pilot system.
February 17, 1998	ISRP RRPS Pilot start-up.	AUSC begins processing remittances through the pilot system.

## **Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities**

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### **Analysis of the ISRP Pilot Production Results**

### **Attachment III**

On May 6, 1998, the Service conducted a Preliminary Pilot Review (PPR) of the Austin Service Center (AUSC) ISRP pilot operations. According to the Service's Systems Development Life Cycle, pilot performance should be carefully measured against the benefits established in the project's business case. The latest version of the ISRP business case, dated July 1, 1997, established a 10 percent productivity gain for the Distributed Input System (DIS) and a 25 percent productivity gain for the Residual Remittance Processing System (RRPS) as the basis for projected labor savings.

Although the labor savings from ISRP productivity gains comprise approximately 34 percent<sup>ii</sup> of the total estimated benefits from the ISRP investment, the production data presented at the PPR requires additional analysis to determine if pilot operations met the 10 percent and 25 percent productivity gains. In addition, the project office did not control the production volumes, return complexity, or operator experience level of AUSC legacy operations to ensure that they were comparable with ISRP pilot production results. Without a legacy control group, ISRP productivity gains based upon current year AUSC legacy operations are less reliable than other data sources (i.e. current year national average production rates or prior year production rates).

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### **The Service's Executive Steering Committee was presented the most optimistic DIS production results without contrasting information.**

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The May 6, 1998 PPR presented ISRP DIS production rates in a matrix along with AUSC current year legacy rates; current year scheduled rates; prior year legacy rates; and the current year national averages. The PPR matrix indicated that pilot operations achieved acceptable production rates when processing Forms 1040, 1040A, 1120S, and 1040EZ. The reported results were based upon current year AUSC legacy production and additional analysis indicates that they represented the most optimistic presentation of productivity gains (see Table 1).

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<sup>ii</sup> Labor savings comprise fifty-five million of the total 160 million dollars in projected benefits. Per the July 1, 1997 version of the ISRP project business case, labor savings and total projected benefits are presented in constant Fiscal Year 1997 Dollars.

**Review of the Integrated Submission and Remittance Processing (ISRP)  
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**TABLE 1: Distributed Input System (DIS) productivity analysis based upon data presented in the May 6, 1998, Preliminary Pilot Review (PPR) handouts**

<i>ISRP DIS Productivity</i>	<i>1998 AUSC Legacy Act</i>	<i>1998 AUSC Legacy Sch</i>	<i>1997 AUSC Legacy Act</i>	<i>1998 National Average</i>
Form 1040 OTFP	17.8%	(6.6%)	(1.0%)	2.2%
Form 1040A OTFP	17.1%	(8.0%)	(2.9%)	12.9%
Form 1040PC OTFP	(3.1%)	(5.4%)	(0.8%)	7.5%
Form 1120S	6.2%	5.4%	5.4%	23.1%
Form 940	(32.1%)	(27.9%)	(22.7%)	(21.4%)
Form 1040EZ	85.2%	52.7%	6.7%	(1.0%)
Form 1040X	(17.4%)	4.5%	4.9%	8.3%

DIS productivity gains of 16.8 percent for Forms 1040 and 17.1 percent for Forms 1040A were presented to the Service's Executive Steering Committee at their May 12, 1998 meeting. Documents for the June 11, 1998 Executive Steering Committee reported the completion of the Preliminary Pilot Review with an 18 percent peak performance improvement over Legacy DIS operations. Although these gains are similar to the AUSC legacy productivity gains displayed above (see Table 1), the executives were not presented alternative results.

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**The pilot's RRPS productivity gain over prior year Legacy RPS operations is approximately 80 percent lower than the business case estimate.**

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The PPR RRPS production data was exhibited in a matrix comparing AUSC's current year RRPS production rate to its prior year legacy RPS production rate. The analysis was based on comparable time periods spanning the entire pilot-operating period (i.e., February 17, 1998 through April 25, 1998). Additional analysis indicates that the RRPS system achieved a 15.2 percent cumulative productivity gain on April 25, 1998.

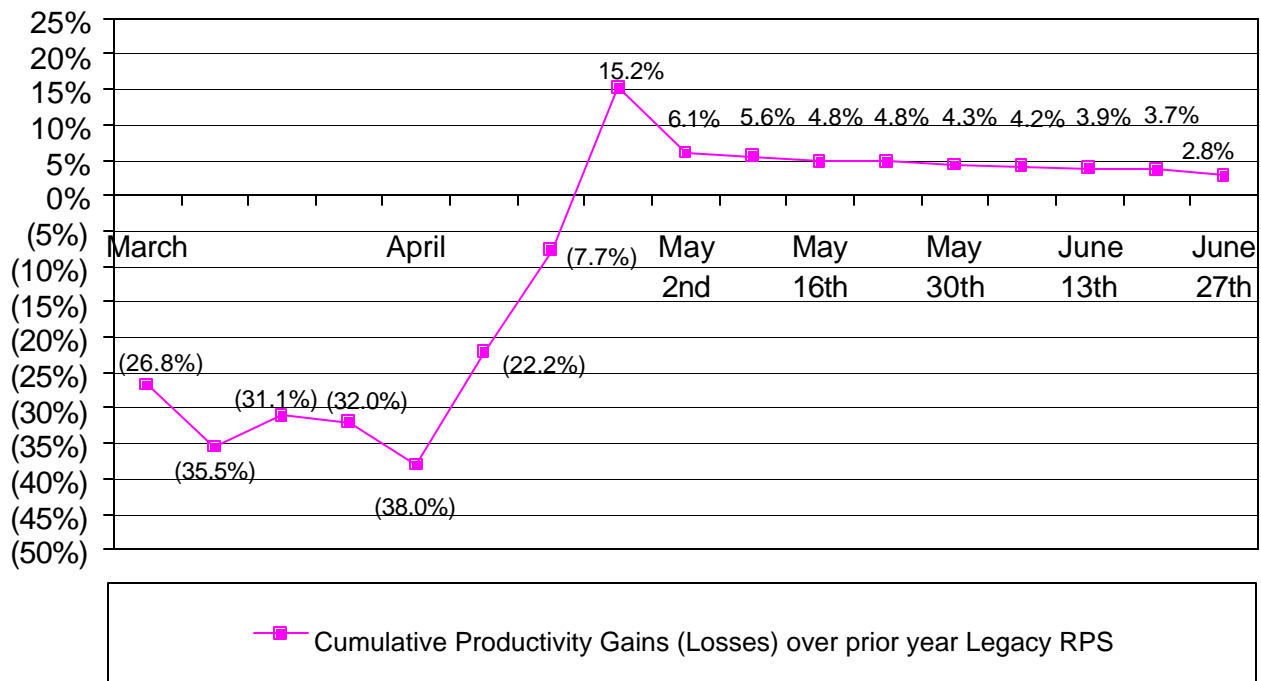
As the following graph illustrates, this production rate was significantly higher than any time period before or after this date (see Table 2). When augmented with current production data, the analysis shows that the cumulative productivity gain dropped to 6.1 percent the following week and steadily declined to 2.8 percent as of the week ended

## Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities

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June 27, 1998. As a result of management's conclusion that the RRPS has remained stable since the end of April 1998, we calculated the average cumulative productivity gain for the ten weekly periods from April 25 to June 27, 1998. During this period, RRPS averaged a 5.5 percent productivity gain, approximately 80 percent lower than the business case estimate.

**TABLE 2: Graph of the Residual Remittance Processing System's (RRPS) productivity gains based upon prior year legacy RPS production.**





**Review of the Integrated Submission and Remittance Processing (ISRP)  
System Software Development and Pilot Activities**

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Management's Response to Internal Audit Memorandum (IAM) #1

Attachment IV



DEPARTMENT OF THE TREASURY  
INTERNAL REVENUE SERVICE  
WASHINGTON, D.C. 20224

May 11, 1998

MEMORANDUM FOR REGIONAL INSPECTOR  
SOUTHEAST REGION I:IA

FROM:

*for* Barbara Jenkins *Patricia M. Hudak*  
National Director, Submission Processing T:S  
Eugene J. Barbato, Jr. *Eugene J. Barbato, Jr.*  
Director, Submission Processing Division  
Information Systems IS:S:SP

SUBJECT:

Internal Audit Memorandum on the Integrated Submission and  
Remittance Processing (ISRP) System Software Development  
and Pilot dated March 17, 1998

We have reviewed the subject memorandum and provide the attached Management Responses to Internal Audit's issues and concerns.

If you have any questions, or need additional information, please feel free to contact Gene Barbato on (202) 283-3710 or Barbara Jenkins on (202) 283-1000.

Attachment

CONCUR:

*Robert S. Albrecht*  
Acting, Associate Commissioner for Modernization/  
Chief Information Officer IS

*May 6, 1998*  
Date

*Robert S. Albrecht*  
Chief, Taxpayer Service/  
Acting Chief Compliance Officer C:P

*5-10-98*  
Date

## Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities

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### Attachment I

#### **INTERNAL AUDIT'S ISSUES**

**Internal Audit Issue:** "The risks of piloting the ISRP Residual Remittance Processing System (RRPS) are higher than for the ISRP Distributed Input System (DIS). (See Attachment I)."

*(Source: IA Memo dated 3/17/98, Page 1, First Issue)*

**Internal Audit Issue:** "The ISRP system's post-Generalized Mainline Framework (GMF) processing will generate erroneous balance due notices and non-rebate refunds. (See Attachments II and III)."

*(Source: IA Memo dated 3/17/98, Page 1, Second Issue)*

#### **MANAGEMENT'S RESPONSES**

**Response:** We agree with Internal Audit's statement that "the risks of piloting the Residual Remittance Processing System (RRPS) are higher than for the ISRP Distributed Input System (DIS)." Management has been fully aware and informed of the increased risks associated with piloting the RRPS portion of the ISRP System and this determination had been shared with Internal Audit. Accordingly, the risks pertaining to the RRPS portion of the ISRP system have been included in the ISRP Contingency Plan, which contains contingency scenarios designed to mitigate these specific risks. On January 30, 1998, at the Operational Readiness Review (ORR) management made an executive decision to delay the start-up for piloting the RRPS portion of the ISRP system based on that concern.

**Response:** We agree with Internal Audit's statement that "The ISRP system's post-Generalized Mainline Framework (GMF) processing will generate erroneous balance due notices and non-rebate refunds." Management has been fully aware and informed of the erroneous notices and non-rebate refunds. Lockbox and ISRP will not bypass the unpostable condition checks now that the batch headers for the returns are coded like RPS. New procedures have been defined and programming is being developed to prevent erroneous non-rebate refunds by applying a freeze code to ISRP and Lockbox accounts with multiple TC 610s.

## Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities

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### Attachment I

#### **INTERNAL AUDIT'S ISSUES**

**Internal Audit Issue:** "We advised Management that the Residual Remittance Processing System (RRPS) pilot system was not ready to process live taxpayer data."  
(Source: IA Memo dated 3/17/98, Attachment I, Page 1, First Issue)

**Internal Audit Statement:** "Conduct a complete "end-to end" test of DIS operations as planned for RRPS, to determine if the system can operate for an extended period of time without generating any high priority errors."  
(Source: Attachment I, Page 1, First Bullet)

#### **MANAGEMENT'S RESPONSES**

**Response:** We did not agree with Internal Audit's statement. A very extensive analysis of processing conditions took place before processing began that supported the decision to begin processing remittance returns. SAT testing indicated that IRS could process remittances through the new system. It also indicated that there were still some problems with the system that only could be resolved through processing of live data. Armed with this information and a full contingency in the legacy system, the Service was able to proceed with the pilot with minimal risk. Results indicate that the decision made was the right decision.

**Response:** The ISRP SAT Team conducted a thorough and complete "end-to-end" test of all submission data (F940, F1040, F1040A, F1040 EZ, F1120S) for DIS, processing the documents through ISRP Submission and creating both an ISR-0101 and an ISR-0108 file. We processed the ISRP output through all Generalized Mainline Framework (GMF) programs, creating a TAPE-EDIT-PROCESSOR File (GMF-1501), and input the file to IMF and BMF Master File processing. We verified that all GMF-1501 data posted appropriately to the master files.

The ISRP SAT team processed vouchers and checks through ISRP Remittance processing, through the Unisys Pre-Mainline processing, and through the Generalized Mainline Framework (GMF) programs. We verified

**Review of the Integrated Submission and Remittance Processing (ISRP)  
System Software Development and Pilot Activities**

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**Attachment I**

**INTERNAL AUDIT'S ISSUES**

**MANAGEMENT'S RESPONSES**

that the output formats of the TAPE-EDIT-PROCESSOR program (GMF 15), the data transmitted to Master File processing, were correct for all ISRP data. We also provided files ISR-0503 and ISR-0504, containing Bank Transaction and User Fee data for Integrated Data Retrieval System (IDRS) processing, to the IDRS SAT team. We utilized specific accounts and Taxpayer Identification Numbers (TIN) provided by the IDRS SAT team, allowing them to verify the IDRS data could be processed through the TDA Run streams.

We are not aware that any "end-to-end" tests of RRPS were planned, as Internal Audit asserts. The RRPS output transactions were processed through GMF programs and the GMF 1501 file was reviewed for accuracy. The contents of the records met the requirements for the interchange between Service Center programs and master files. We will review ISRP Remittance processing during Increment II testing and interfacing our test vouchers and checks with both RPS Pre-Mainline and GMF programs. As a result of concerns from both Management and Internal Audit, for Increment II, we will also arrange to process the Remittance GMF 15 output through the Master File program.

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## Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities

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### Attachment I

#### **INTERNAL AUDIT'S ISSUES**

**Internal Audit Statement:** "Consider including sample testing of ISRP (DIS and RRPS) processed data for posting accuracy during "end-to-end" test."

*(Source: Attachment I, Page 1, Second Bullet)*

**Internal Audit Statement:** "Increase Management oversight and Executive approval for each incremental increase in RRPS production during pilot operations."

*(Source: Attachment I, Page 1, Third Bullet)*

**Internal Audit Statement:** "The TRTM was not up to date at the time of our analysis, although the ISRP project (including System Acceptability Testing) ran over 1,000 tests to evaluate 714 allocated requirements."

*(Source: Attachment I, Page 1, Fourth Bullet)*

#### **MANAGEMENT'S RESPONSES**

**Response:** As stated above, Management did not plan any "end-to-end" test of RRPS operations. However, during testing the RRPS output transactions were processed through GMF programs and the contents of the records met the requirements for the interchange between Service Center programs and Master Files.

**Response:** Management requests further clarification of this recommendation. Management and Executive oversight cannot possibly be at any higher level. Also, ISRP is on the agenda of the Commissioner's Executive Steering Committee Meetings which are held monthly.

**Response:** Management disagrees that the test status results were not updated or were incomplete on certain functional requirements at the time that Internal Audit (IA) conducted its statistical analysis. It is our understanding that our test status results are consistent with any testing environment prior to formal test completion. The TRTM is maintained by the ISRP Project Office. The ISRP Project Office receives updates to the TRTM from several test teams. Internal Audit's statement implies that the information contained in the matrix should precisely correspond to the ISRP testing statuses. Unfortunately, test teams are unable to provide daily or weekly information for the TRTM, given the volume

## Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities

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### Attachment I

#### **INTERNAL AUDIT'S ISSUES**

**Internal Audit Statement:** "Within one week of start-up, 267 problem reports (5534's) were outstanding."  
(Source: Attachment I, Page 1, Fifth Bullet)

**Internal Audit Statement:** "Management identified 22 of the 267 open 5534's as high priority problems requiring resolution prior to pilot start-up. Project testing was directed to concentrate their activities on these 22 open high priority items."  
(Source: Attachment I, Page 1, Sixth Bullet)

#### **MANAGEMENT'S RESPONSES**

of ISRP test requirements and the fluid nature of testing activities. Updates to the TRTM are provided to the ISRP Project Office on a periodic basis. This resulted in requirements not being absent, only the status of the test of that requirement was not current.

Also, Internal Audit conducted this analysis of the ISRP Project Office's controls of testing activities while various teams were still conducting ISRP testing.

**Response:** Management disagrees with Internal Audits assessment that 267 problem reports (5534's) were outstanding within one week of start-up. Only a small percentage of the 267 Problem Reports that were open at that time were determined by Management as having a high enough priority to be required for start-up. All of these specific Problem Reports were resolved prior to start-up. The remaining problems which were of lesser significance (cosmetic or enhancement) will be resolved with Increment 2 deliveries, as agreed upon by Lockheed Martin Federal Systems (LMFS) and the Service.

**Response:** This is true, Management assessed the priority levels for each of the 5534's (Problem Reports), and identified 22 of them as high priority resolutions necessary prior to system start-up. Resolution of these problems was not dependent upon Internal Audit's direction, but, rather a logical culmination of our processes.

## Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities

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### Attachment I

#### **INTERNAL AUDIT'S ISSUES**

**Internal Audit Statement:**

"Post-Generalized Mainline Framework (GMF) tests were never planned or conducted."

*(Source: Attachment I, Page 1, Seventh Bullet)*

**Internal Audit Statement:**

"Although Management did delay the posting of ISRP DIS transactions until test data was confirmed as accurately posted to Master File, they did not require similar assurances for the RRPS."

*(Source: Attachment I, Page 1, Eighth Bullet)*

**Internal Audit Statement:** "Management rejected our recommendation to determine whether the DIS portion of ISRP could operate for an extended period of time without high priority errors."

*(Source: Attachment I, Page 2, Ninth Bullet)*

**Internal Audit Statement:** "Management ultimately decided to begin live production on the ISRP DIS on February 9, 1998 and delay the start-up of live production on the ISRP RRPS until February 17, 1998."

*(Source: Attachment I, Page 2, Tenth Bullet)*

#### **MANAGEMENT'S RESPONSES**

**Response:** Management disagrees. (See Management's Response for Attachment I, Page 1, First Bullet)

**Response:** Management disagrees. See Management's Response for Attachment I, Page 1, First Bullet)

**Response:** We agree. Management rejected this determination based on the fact that it would not be feasible without the implementation of ISRP DIS pilot.

**Response:** Management agrees, the Operational Readiness Review (ORR) held on January 30, 1998, with executives and primary representatives from our matrix partner organizations, including Internal Audit, provided objective determinations for the decision to proceed with the ISRP Pilot. Production on the ISRP DIS began on February 9, 1998. The decision to defer ISRP RPS until February 17, 1998, was more of an opportunity for the employee/staff to become comfortable with ISRP operations than it was for any explicit system inadequacies.

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## Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities

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### Attachment I

#### **INTERNAL AUDIT'S ISSUES**

**Internal Audit Statement:** "Although the DIS portion of ISRP is continuing to process taxpayer returns, the following results indicate RRPS was not ready for a live production environment."

*(Source: Attachment I, Page 2, First Issue)*

**Internal Audit Statement:** "AUSC was unable to deposit approximately 13,000 taxpayer remittances processed through RRPS on March 4, 1998 because of a system crash that suspended remittance transaction within the transport system. This deposit, totaling over \$15,000,000 missed the required cycle time; however, the funds were eventually deposited two days later on March 6, 1998. The 13,000 payment transactions were not processed through GMF until March 8, 1998, and Management believes that some erroneous balance due notices may result."

*Source: Attachment I, Page 2, Eleventh Bullet)*

#### **MANAGEMENT'S RESPONSES**

**Response:** Management disagrees with Internal Audit's statement. The problems encountered during the early processing of remittance returns were within the risk zone that IRS expected. You cannot totally perfect a new system during integration and SAT testing. We were aware of this and took the necessary steps to guarantee that we could continue to process if the need came up to temporarily shut ISRP down while resolving problems or had to have temporary "work-arounds" while we worked the system bugs. Again, the purpose of the pilot is to identify and correct equipment and software problems during live production in one location before committing the entire processing capacity to a new system.

**Response:** Management concurs with Internal Audit's findings and has implemented fixes that resolved the problems encountered on March 4, 1998. However, we do not agree that RRPS was not ready for live production. The system is functioning under the limited volume of the pilot and is allowing the Service to identify and resolve problems before the peak processing period. This is the primary function of a pilot and the RRPS pilot is functioning as designed. We do not believe that this short downtime will result in erroneous balance due notices. There was no indication of this during subsequent notice review activities.



## Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities

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### Attachment I

#### INTERNAL AUDIT'S ISSUES

**Internal Audit's Statement:** "While the system was shut down, the AUSC Document Perfection Branch could not access the RRPS image archive system and was unable to work over 180 ISRP RRPS error cases."

*(Source: Attachment I, Page 2, Twelfth Bullet)*

**Internal Audit's Statement:** "The Pocket Cut Report, a detailed report used to reconcile checks with the bank batch ticket, is randomly omitting checks from the detailed check listings. This problem occurred and was reported during System Acceptability Testing (SAT)."

*(Source: Attachment I, Page 2, Thirteenth Bullet)*

**Internal Audit's Statement:** "As of March 6, 1998, the ISRP system had 45 open trouble tickets on the Integrated Network and Operations Management Systems (INOMS)."

*(Source: Attachment I, Page 2, Fourteenth Bullet)*

**Internal Audit's Statement:** "The ISRP system's post-Generalized Mainline Framework (GMF) processing will generate erroneous notices and refunds."

*(Source: Attachment II, Page 1, Paras 1-4)*

#### MANAGEMENT'S RESPONSES

**Response:** Management concurs with this Internal Audit's statement. Again, this was the result of the initial problem of hung blocks (see paragraph above). The corrective action taken to release the blocks also released the archive images that allowed Document Perfection to work the ISRP RRPS error cases.

**Response:** Management concurs with this statement as of the date of the Internal Audit report. Lockheed Martin Federal Systems (LMFS) is working solutions to this issue. Disclosure issues delayed the fix for this from LMFS. Requested data has been provided to Lockheed Martin Federal Systems, and they resolved this problem on April 2, 1998. This is not a major problem during pilot because of the daily input volumes.

**Response:** Management agrees that as of March 6, 1998, there were 45 open trouble tickets on the Integrated Network and Operations Management Systems (INOMS), in which only (3) three of the 45 were priority one.

**Response:** Management agrees with Internal Audit's concern relative to the issue pertaining to the generation of erroneous notices and refunds. Lockbox and ISRP will no longer bypass the unpostable conditions, now that the batch headers for the returns are being coded like RPS returns. As of March 18, 1998, full paid IMF returns from Lockbox

**Review of the Integrated Submission and Remittance Processing (ISRP)  
System Software Development and Pilot Activities**

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**Attachment I**

**INTERNAL AUDIT'S ISSUES**

**MANAGEMENT'S RESPONSES**

**Internal Audit's Statement:** "The ISRP and Lockbox transactions circumvent unpostable controls that prevent the issuance of erroneous balance due notices and non-rebate erroneous refunds. Lockbox transactions have created erroneous balance due conditions and non-rebate erroneous refunds."

*(Source: Attachment II, Pages 1 & 2)*

**Internal Audit's Statement:** Management agreed with this finding and is attempting to respond and control the associated risks.

*(Source: Attachment II, Page 3, last para)*

and ISRP will post the TC150 and TC 610 only if the TIN and/or money amounts match. If there is no match, the TC 150 will unpost. The system will not only cause the TC 150 to unpost for research under these conditions, it will also cause a non-coded TC 150 trying to post to a module with a TC 610 to go to Blocks-Out-Of-Balance for research. These actions will eliminate erroneous balance due notices for these situations.

**Response:** Management agrees with Internal Audit's concern relative to the non-rebate erroneous refunds. New procedures have been defined and programming is being developed to prevent erroneous non-rebate refunds by applying a freeze code to ISRP and Lockbox accounts with multiple TC 610s. Now that Lockbox and ISRP Full Paid IMF returns are coded as RPS returns, the system no longer circumvents unpostable conditions that prevent erroneous balance due notices and non-rebate erroneous refunds.

**Response:** As cited above, corrective actions have been implemented.

**Review of the Integrated Submission and Remittance Processing (ISRP)  
System Software Development and Pilot Activities**

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Management's Response to Internal Audit Memorandum (IAM) #2

Attachment V

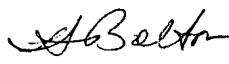


ASSOCIATE COMMISSIONER  
CHIEF INFORMATION OFFICER

DEPARTMENT OF THE TREASURY  
INTERNAL REVENUE SERVICE  
WASHINGTON, D.C. 20224

JUL - 6 1998

MEMORANDUM FOR CHIEF INSPECTOR

FROM: Helen H. Bolton   
Acting Deputy Chief Information Officer for  
Information Resources Management IS:I

SUBJECT: Internal Audit Memorandum # 2 on the Assessment of the  
Integrated Submission Processing (ISRP) Systems Residual  
Remittance Processing System's (RRPS) Pilot Performance,  
dated May 18, 1998

We have reviewed the subject memorandum and are providing the attached  
management responses to Internal Audit's findings, issues, and concerns.

If you have any questions, or need additional information, please feel free to contact  
me on (202) 283-4060 or have a member of your staff contact Donna Downing on  
(202) 283-4159.

Attachments

CONCUR:   
Acting Associate Commissioner for Modernization/  
Chief Information Officer IS

7/7/98  
Date

  
Chief Operations Officer OP

7/14/98  
Date

## Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities

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### Internal Audit Issue No. 1--The RRPS Pilot at AISC Has Not Yet Demonstrated Systemic Stability

Management disagrees with Internal Audit findings that the RRPS Pilot at AISC has not yet demonstrated systemic stability. This is primarily based on the following reasons.

- 3 Since the last week of April 1998, RRPS remained stabilized and functioned well throughout the period of peak processing.
- 3 The six-hour period of downtime that occurred on April 22, 1998 was not a system or RRPS server crash.
- 3 In several instances, failures of the RRPS system were cited as reasons for an occurrence (e.g. late/missed deposits, voucher scanning jams and errors), when, in fact, the problem lay elsewhere.

Note: Management acknowledges that Austin Service Center and SAT did experience several systemic problems but at no time did the system experience a total "crash". The ISRP Project Office defines a system crash to be used in the future by all ISRP Partners as follows: The system performs instantaneous and involuntary shutdown of all operating programs. It is not possible to re-boot the system and continue operations. However, it is necessary to perform corrective procedures and possibly time consuming data backup and/or security precautions in order to make the system operational. It may be necessary to make program corrections to repair the cause of the system crash, which could require a significant period of time.

(See details in Attachments I starting on Page 4)

**Review of the Integrated Submission and Remittance Processing (ISRP)  
System Software Development and Pilot Activities**

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**Internal Audit Issue No. 2--The RRPS Pilot at AISC Has Not  
Met All of Its Production Requirements**

Management disagrees with the Internal Audit finding that the RRPS Pilot at AISC has not met all of its production requirements. This is based on the following reasons.

- 3 We acknowledged going into the Pilot that the primary purpose was to test the system as much as possible, providing AISC with some latitude in the area of deposit requirements.
- 3 We fully understood the fact that conducting a pilot of the RRPS and adequately testing the system meant that AISC would not immediately switch back to the legacy system without fully analyzing the problem and exercising sound judgment, e.g., impact of the problem.
- 3 The national deposit requirement applies to at least 90% of the perfect taxpayer remittances must be deposited by the next business day; and remittances requiring perfection are on a 48 to 96 hours cycle to permit research resulting in posting to the correct taxpayer.

(See details in Attachment II, starting on Page 12)

**Internal Audit Issue No. 3 --The RRPS Pilot at AUSC Has  
Shown the Image Archive Database is unreliable.**

Management agrees with Internal Audit finding that the RRPS Pilot at AUSC has shown the Image Archive Database was unreliable for most of the period covered in the report.

3 The archive system is identified as one of the ten critical items that must be fixed prior to national rollout. Management believes problems identified have been contained and has instituted corrective actions.

3 While remittance research timeliness is affected if the remittance is not in the archive database, there are alternative techniques that may be used to locate and validate the remittance.

(See details in Attachment III, starting on Page 15)

## Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities

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### ATTACHMENT I

#### INTERNAL AUDIT'S ISSUES

**Internal Audit Issue:** "Due to management's restrictions to our presence at ISRP meetings, we cannot be sure that we have been advised of all system crashes."

*(Source: IA Memo #2, dated 5/18/98, Page 2, Last Para, Second Sentence)*

#### MANAGEMENT'S RESPONSES

**Response:** Management disagrees with Internal Audit's (IA) assessment that they may not have been advised of all system crashes. Management has kept IA advised of all issues and "crashes". This has been done through IA's attendance at several meetings, and management provided copies of minutes for meetings IA does not attend, copies of all daily /weekly project status reports, and trouble tickets on the INOMS system. All of this information is also located on the Austin Service Center home page. The ISRP Project values the input and guidance provided by Internal Audit. It is our goal to continue to work in a partnership relationship with Internal Audit to ensure the successful implementation of the ISRP project.

## Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities

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### INTERNAL AUDIT'S ISSUES

**Internal Audit Issue:** "For example, the RRPS servers crashed on April 22, 1998, causing a six-hour work stoppage. The crash was not mentioned in any of the three AUSC ISRP Status Meetings held from April 22 through April 27, 1998." "The April 22, 1998 crash caused a six-hour work stoppage."

*(Source: IA Memo#2 dated 5/18/98, Page 2, Last Para, Third & Fourth sentences and Page 3, first bullet)*

### MANAGEMENT'S RESPONSES

**Response:** Management disagrees. The RRPS servers did not crash on April 22, 1998. The common services file server, which affected the OE/KV operations in both DIS and RRPS, experienced a failure due to a rapid power recycling during reboot. The original problem was that the inventory data base on common server (FS-1) was full and new inventory blocks could not be created. It was reported that the system was slow and the NMSS server was rebooted in an attempt to rectify the slow down. Reboot should be the last resort and done only after all relevant facts and data have been recorded. It is recommended that the power be off for a minimum of one minute before reapplying power. Before the reboot, the controller and drives were working as designed. Subsequent to the reboot, AUSC did have to replace the RAID and controller card which took six hours to perform. During the time the common servers were down, the transports and TMS workstations did not fail and a deposit of 46,999 remittances was made the evening of April 22, 1998. While this issue was not raised in the ISRP status meetings, a conference call was held on April 23, 1998, with LMFS, IS, DIS, and R & C Branch Chiefs, and



**Review of the Integrated Submission and Remittance Processing (ISRP)  
System Software Development and Pilot Activities**

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**INTERNAL AUDIT'S ISSUES**

**MANAGEMENT'S RESPONSES**

**Response (Cont'd):**

representatives from N.O. and AUSC ISRP Project Offices, to specifically discuss this issue.

**Internal Audit Issue: "Printing Limitations."**

*(Source: IA Memo #2 dated 5/18/98, Page 3, First Para, Second Bullet)*

**Response:** Management agrees that several printing problems occurred during the time frame as cited in Internal Audit's Memorandum #2 on ISRP's RRPS Pilot Performance. The problem indicated in this bullet was resolved. The printer limitations which occurred at AUSC have been resolved by reconfiguring the large HP Printers to the TMS system, and placing all printers on the network for easy access.

**Internal Audit Issue:** "On March 31, the RRPS crashed and required the acquisition and printing of 6,234 taxpayer remittances from Federal Reserve Microfilm images to ensure proper postings to Master File. This recovery action took 44 staff days to complete."

*(Source: IA Memo #2, dated 5/18/98, Page 3, First Para, Third Bullet)*

**Response:** Management disagrees with Internal Audit's statement that the RRPS crashed; however, the DBS\_1 file server did fail. The ISRP system copies all Image data from the DBS\_1 Server to the backup server, DBS\_2, for temporary data backup. VINCA software monitors the DBS\_1 Server for any possible failure(s). The problem identified in AUSC is that the VINCA software is much too sensitive, and was interpreting impending DBS\_1 Server failures incorrectly. The solution was to turn VINCA off, making DBS\_2 Server always the primary database server, and continue processing that way until a fix to VINCA was

**Review of the Integrated Submission and Remittance Processing (ISRP)  
System Software Development and Pilot Activities**

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**INTERNAL AUDIT'S ISSUES**

**Internal Audit Issue:** "Management shutting down RRPS from March 4 to March 10, 1998 due to ISRP RRPS inability to meet deposit time frames. RRPS crash causing recovery through legacy RPS."

*(Source: IA Memo #2, dated 5/18/98, Page 3, First Para, Fourth Bullet)*

**MANAGEMENT'S RESPONSES**

**Response (Cont'd) :**

available. The fix will be dropped in Austin for Increment 2 processing currently scheduled for August 1998.

Improper database recovery procedures resulted in recreating the 6,234 payment transactions through legacy RPS. This process required 340 staff hours (3 workdays) to recover. Normally, a proper database recovery would have eliminated the need to recreate these transactions. Unfortunately, the problem was human error and not the result of the system problem as previously stated.

**Response:** Management disagrees. The RRPS was not shut down due to the inability to meet deposit time frames. The problem was the polling printer PC. On March 3, the deposit manager experienced problems with printing the Detail Pocket Cut Report and Endpoint Master Listing, two reports which are critical to making deposits. The Help Desk was called and a System Administrator (SA) was unable to correct the problem. However, the LMFS subcontractor was able to print the reports (through a back door process), the deposit was balanced and remittances were sent to the Federal Reserve Bank (FRB). The same printer problem occurred on March 4, 1998, and the deposit manager verified online that the deposit reports did not

**Review of the Integrated Submission and Remittance Processing (ISRP)  
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**INTERNAL AUDIT'S ISSUES**

**MANAGEMENT'S RESPONSES**

**Response (Cont'd):**

balance. She opted to hold the deposit until the next day to see if the reports could be printed, then determine the imbalance condition.

On March 5, 1998, work continued through RRPS. However, the Director decided to revert to legacy until the polling printer problem could be resolved. Again, using the back door process, the deposit reports were printed for March 4, 1998, and the deposit of 13,508 items were sent to the FRB on March 5, 1998. The March 5, 1998, deposit of 9,717 items also went to the FRB on March 5. Legacy RPS was utilized on March 5, 6, and 9, 1998, to make deposits (March 7 and 8 were over the weekend). On March 10, 1998, Receipt & Control began re-entering remittances through ISRP RRPS.

**Internal Audit Issue:** "AUSC stopped scanning vouchers through the pilot system due to frequent paper jams caused by the various weights of paper vouchers and due to excessive scanline errors caused by variations in the placement of voucher scanlines."

*(Source: IA Memo #2, dated 5/18/98, Page 3, First Para, Fifth Bullet)*

**Response:** Management disagrees that this is being identified as an issue related to the ISRP Pilot. This is not an ISRP problem. It is a limitation of the scanning technology. These types of problems are experienced when the notices and vouchers do not have uniform scanlines. A decision was made to discontinue processing scannable vouchers and notices because of the additional cost to sort by scanline and the high fallout to the correction function.

**Review of the Integrated Submission and Remittance Processing (ISRP)  
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**INTERNAL AUDIT'S ISSUES**

**Internal Audit Issue:** "Also, since the beginning of pilot operations, the RRPS system has also experienced problems posting transaction data to the master file. For example, during the period February 17, 1998, through March 24, 1998, incorrect transaction received dates for 25,623 remittances were posted to Master File (MF)."

*(Source: IA Memo #2, dated 5/18/98, Page 3, Para 2, Second Sentence)*

**MANAGEMENT'S RESPONSES**

**Response (Cont'd):**

When paper vouchers are not printed in accordance with the appropriate IRS print specifications, the scanline varies. This problem is not unique to ISRP but also occurred with legacy RPSII and with Lockbox. It was a Management decision to discontinue processing the small volume through the scanning process during peak processing because of the delays experienced with re-adjusting the read window. Austin Service Center resumed scanning vouchers and notices through the transport on April 27, 1998.

**Response:** Management agrees that this occurred; however, the impact was minimal. Incorrect transaction dates did post to the Master File because the system was duplicating the first date to all succeeding records. Once the problem was identified, management immediately took action to fix it. This problem was fixed the very next day. AUSC used IDRS to make corrections to the incorrect dates on Master File. The problem was resolved very quickly which resulted in minimum impact. This type of problem could only have been identified in production using live data, since SAT was unable to detect the problem during the testing phase.

## Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities

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### INTERNAL AUDIT'S ISSUES

**Internal Audit Issue:** "National Office analysts decided that 1,789 additional adjustments were required for payments over \$2,000." "The official minutes from the April 28, 1998 AUSC Operational Status Meeting reported that no written procedures regarding the recovery effort for payments over \$2,000 had been received from National Office."

*(Source: IA Memo #2, dated 5/18/98, Page 3, Para 2, Second & Third Bullets)*

**Internal Audit Issue:** "Receipt & Control Branch Chief stated that all deposit reports prior to the E-fixes were inaccurate, but management has decided not to correct these reports."

*(Source: IA Memo #2, dated 5/18/98, Page 4, First bullet (Top of Page))*

### MANAGEMENT'S RESPONSES

**Response:** Management agrees with Internal Audit's overall assessment of the additional adjustments required for payments over \$2,000. A joint business decision was made to correct all payments of \$2,000 or more regardless of the number of days the payments were posted early. While formal written procedures were not issued, extensive discussions were held among representatives from IA, AUSC, and N.O., and this decision was fully communicated. 2c

2c

**Response:** Management disagrees with Internal Audit's statement. The Chief, Receipt and Control Branch actually reported that the "Deposit Activity Report was incorrect", not "all deposit reports". There is no way to recover the correct receive dates for the Deposit Activity Report without physically looking at each transaction individually during that specified period of time. The source documents had already been released to the next function prior to finding the received date problem. The Pre-Batch

## Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities

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### INTERNAL AUDIT'S ISSUES

**Internal Audit Issue:** "Our sample results indicate that over 2,600 remittance transactions may not have posted to the master file. We reviewed a statistically valid sample of 1,400 RRPS transactions from approximately 330,000 listed on Forms 813 from February 17, 1998, through April 2, 1998. We are able to verify that 1,377 of the 1,400 remittances were posted or controlled on the master file or on the AUSE ERS database. However, we could not locate the remaining 23 remittances (less than 2 percent)."

**Internal Audit Issue:** "To date, SPSS has located twelve of the remittance transactions and has ordered supporting documentation from the RRPS image archive to resolve the remaining eleven remittances."

*(Source: IA Memo #2, dated 5/18/98, Page 4, First Para, Last Sentence)*

### MANAGEMENT'S RESPONSES

#### **Response (Cont'd):**

Function began sorting work by receive date on March 24, 1998, to alleviate this problem until the E-fix was installed.

**Response:** Management disagrees. Out of the 23 payments in the sample that Internal Audit could not verify as having posted to the Master File, 20 have now posted. The remaining three payments are in resequence status or unpostables, awaiting the posting of the corresponding first-time-filer TC 150 tax returns, which are Full Paid Returns and have been shelved. The Program Completion Date (PCD) for shelved returns is July 15. This is normal processing and would have occurred in legacy as well as ISRP. (See Attachment IV - This listing shows the resolution information on 20 of the 23 transactions.)

**Response:** Management disagrees. Again, out of the 23 transactions, three have not yet posted to the Master File. The Austin staff has indicated the three remaining transactions are most likely first time filers with Transaction Code (TC) 610's waiting for the TSC 150 full-paid return to post. This is normal processing for posting payments associated with full-paid returns and is not a result of ISRP processing. This situation does and would occur under legacy RPS. (See Attachment IV- This listing shows the resolution information on 20 of the 23 transactions.)

**Review of the Integrated Submission and Remittance Processing (ISRP)  
System Software Development and Pilot Activities**

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**ATTACHMENT II**

**INTERNAL AUDIT'S ISSUES**

**Internal Audit Issue:** "In addition, the April 1998 Deposit Activity Report also shows that for the three days from April 28 through April 30, 1998, AUSC was not able to meet the 90 percent next day deposit criteria."

*(Source: IA Memo #2, dated 5/18/98, Page 4, Fourth Para, Last Sentence)*

**Internal Audit Issue:** "On February 25, 1998, AUSC stopped scanning vouchers through the pilot system and had not scanned more than 5,500 vouchers during a single ten-hour shift."

*(Source: IA Memo #2, dated 5/18/98, Page 5, First Bullet)*

**MANAGEMENT'S RESPONSES**

**Response:** Management disagrees that this is being identified as an issue related to the ISRP Pilot. The deposit figures for April 28 thru 30, 1998 were reviewed. Our analysis shows that 75 percent of the volumes deposited for those three days included work from the perfection area (which are on an extended deposit cycle) received from the Lockbox, and several district offices, including the co-located district. The delays that were experienced was not an ISRP problem but a resource management issue.

**Response:** Management agrees. AUSC history for 1996 and 1997 indicates that there were not enough scannable vouchers/notices on any given day to support the 13,000 volume needed to test the system. The 13,000 equates to ten percent of the total volume projection for ISRP sizing only and may only be met by one or two service centers depending on their receipt patterns.

**Review of the Integrated Submission and Remittance Processing (ISRP)  
System Software Development and Pilot Activities**

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**INTERNAL AUDIT'S ISSUES**

**Internal Audit Issue:** "AUSC ISRP Project manager indicated RRPS would no longer be able to test the 130,000 volume contract requirement."

*(Source: IA Memo #2, dated 5/18/98, Page 5, Second Bullet)*

**MANAGEMENT'S RESPONSES**

**Response:** Management agrees. This statement was based on the fact that by April 27, 1998, the peak remittance volume had dwindled considerably and there would not be another opportunity to reach the expected volume of 130,000. The contract required the transport to process 13,000 scannable vouchers and 117,000 remittances daily. AUSC had 45,000 OE/KV in inventory ahead of the transport, when the common services file server was down for six hours. The transport continued to operate during the downtime allowing the transport operators to eliminate the inventory OE/KV had established. The OE/KV operators were unable to get ahead of the transports from that point on. Therefore, the OE/KV function (common services) became the bottleneck because they could not keep up with the transports.

AUSC did not have enough volume to test the performance requirement at that time. LMFS had made corrections to the RRPS system in order to provide the ability to process that volume and verify that performance requirement.



**Review of the Integrated Submission and Remittance Processing (ISRP)  
System Software Development and Pilot Activities**

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**INTERNAL AUDIT'S ISSUES**

**MANAGEMENT'S RESPONSES**

**Response (Cont'd):**

However, the maximum volume of 109,000 per shift that was achieved was accomplished in a period of time that could be interpolated into a corresponding shift volume that would meet the performance requirement of 128,000 remittances per shift.

**Review of the Integrated Submission and Remittance Processing (ISRP)  
System Software Development and Pilot Activities**

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**ATTACHMENT III**

**INTERNAL AUDIT'S ISSUES**

**Internal Audit Issue:** "Also numerous trouble tickets pertain to the image archive system. As of May 2, 1998, 17 percent of the open trouble tickets related to image archive problems. Since the RRPS pilot operation, the contractor installed at least six E-fixes relating to archive functionality. As of May 2, 1998, AUSC trouble tickets 273282, 276302, and 290036 are still unresolved."

*(Source: IA Memo #2, dated 5/18/98, Page 6, First Para, First Bullet)*

**Internal Audit's Issue:** "Failure to archive all transactions on March 24, 1998."

*(Source: IA Memo #2, dated 5/18/98, Page 5, Second Bullet)*

**MANAGEMENT'S RESPONSES**

**Response:** Management agrees. As of May 2, 1998, there were numerous trouble tickets pertaining to the image archive system. However, to date, two trouble tickets remain open, (Nos. 273282 and 276302). Management identified the problems with the archive system as one of the ten critical items during the Preliminary Pilot Review (PPR) and that the archive system must be fixed prior to National rollout. Trouble ticket No. 290036 which reported that the Remote Batch Entry server could process only 5,500 documents per hour was closed on May 14, 1998.

**Response:** Management disagrees. All transactions for March 24, 1998, have been restored and are currently available on the archive. (Internal Audit (AUSC) has verified this with the AUSC ISRP Pilot Project Office.)

**Review of the Integrated Submission and Remittance Processing (ISRP)  
System Software Development and Pilot Activities**

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**INTERNAL AUDIT'S ISSUES**

**Internal Audit Issue:** "Remote Batch Entry (RBE) server could process only 5,500 documents per hour."

*(Source: IA Memo #2, dated 5/18/98, Page 6, First Para, Third Bullet)*

**Internal Audit Issue:** "On-line report availability was reduced to one day (five-day contractual requirement)."

*(Source: IA Memo #2, dated 5/18/98, Page 6, Second Para, Second Bullet)*

**Internal Audit Issue:** "Further, on several occasions, AUSC systems administrators have redirected stager operations to help process RRPS images."

*(Source: IA Memo #2, dated 5/18/98, Page 7, First Paragraph)*

**Internal Audit Issue:** "On-line image availability was reduced to three days (five-day contractual requirement). On-line report availability was reduced to one day (five-day contractual requirement)."

*(Source: IA Memo #2, dated 5/18/98, Page 6, First and Second Bullet)*

**MANAGEMENT'S RESPONSES**

**Response:** Management agrees. However, the problem has been fixed and problem ticket (# 290036) was closed on May 14, 1998.

**Response:** Management disagrees. The archive does not produce any reports. Therefore, we cannot determine what specific requirement this bullet addresses.

**Response:** Management agrees. The system is flexible and allows redirecting stagers to help process images. This operation is done by RRPS supervisors, not system administrators.

**Response:** Management disagrees. Archive retrieval can be done by document or by processing day for either the on-line database server or an optical disk, on any given day. As part of the deposit day, all images are stored on both the on-line data base server and the archive optical disk. Also, it is just as fast to pull down an entire day's worth of images to a workstation as it is

**MANAGEMENT'S RESPONSES**

**Response (Cont'd):**

to pull down one document; whether from the on-line archive database server or the archive jukebox. During the Austin pilot, we found that it is much more efficient to pull down an entire day's volume of images to a workstation or multiple workstations (no restrictions) since access to any image is instantaneous.

## Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities

Management's Response to Internal Audit Memorandum (IAM) #3

Attachment VI



CHIEF FINANCIAL OFFICER

DEPARTMENT OF THE TREASURY  
INTERNAL REVENUE SERVICE  
WASHINGTON, D.C. 20224

August 31, 1998

MEMORANDUM FOR REGIONAL INSPECTOR  
SOUTHEAST REGION

FROM: Donna H. Cunningham *DHC*

SUBJECT: Response to Internal Audit Memorandum #3 - Assessment of  
the Preliminary Production Data on the Integrated Submission  
and Remittance Processing (ISRP) Pilot

Your memorandum dated July 2, 1998, offered the opinion that, "Pilot productivity information presented to the Service's Executive Steering Committee (ESC) appears very optimistic and incomplete. If funding decisions are based upon this information, the Submission Processing Division's Fiscal Year (FY) 1999 and FY 2000 budgets could be underfunded." As a result, you recommended that, "The Service not include estimated ISRP productivity savings in the FY 1999 or FY 2000 budget projections until the AISC pilot's productivity information is complete and actual savings are determined."

In lieu of separate responses from each Chief, we have coordinated this response with both Information Systems and Operations. Attached is a memorandum from the Assistant Commissioner (Forms and Submission Processing) which incorporates the views of Information Systems.

In responding to questions from the Commissioner, we continue to utilize the 10 percent productivity improvement for the Distributed Input System (DIS) component of ISRP as projected in the ISRP business case (on which the decision to move forward with this effort was based). We did not use the 17 percent improvement suggested by our initial understanding of pilot performance results because the pilot was not designed to measure the productivity difference between ISRP and the legacy system. As a result, the 17 percent difference was due to many variables, not just to productivity differences between the systems.

While we agree that there is uncertainty about what the actual impact on productivity will be, we are obliged to use the best information available in making budget projections. However, as a result of your memorandum, we did revise the most recent projection which we have provided to the Commissioner to assume no productivity savings in FY 2000 from the Residual Remittance Processing System (RRPS) component of ISRP.

**Review of the Integrated Submission and Remittance Processing (ISRP)  
System Software Development and Pilot Activities**

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If you have any questions or would like to discuss this further, please contact me at (202) 622-6400 or your staff may contact Tom Andretta, National Director for Financial Analysis, at (202) 622-8710.

Attachment

cc: Chief Information Officer  
Chief Operations Officer

## Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities

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ASSISTANT COMMISSIONER  
(FORMS AND SUBMISSION  
PROCESSING)

DEPARTMENT OF THE TREASURY  
INTERNAL REVENUE SERVICE  
WASHINGTON, D.C. 20224

July 10, 1998

### MEMORANDUM FOR CHIEF FINANCIAL OFFICER CFO

FROM: Brien T. Downing *Brien T. Downing*  
Assistant Commissioner  
(Forms and Submission Processing) OP:FS

SUBJECT: Internal Audit Memorandum #3 – Assessment of the  
Preliminary Production Data on the Integrated Submission  
and Remittance Processing (ISRP) Pilot

I have reviewed the Internal Audit Memorandum #3 (IAM) and agree with its intent to show that the positive results of the pilot should not be used as productivity savings in FY 1999 or FY 2000 budget projections. The facts and numbers contained in the report are from the ISRP Preliminary Pilot Review held in May 1998. The primary purpose of the pilot was to determine if the Service could process its peak workload requirements on the ISRP equipment. Both the distributed input system (DIS) and remittance processing (RRPS) were tested and they demonstrated that the Service can successfully process returns and remittances on this system. The IAM states that the productivity information presented to the Service's Executive Steering Committee (ESC) appears to be very optimistic and incomplete. The information presented to the ESC, as indicated below, is not conclusive data; therefore, it should not be used for budget determinations. The IAM would be more accurate if the word "incomplete" was replaced with a more descriptive phrase of the actual circumstances.

The results of the comparison of ISRP processing to Legacy DIS processing should not be used as a measurement for determining productivity improvement. No plans were developed to guarantee equal comparison groups for ISRP and Legacy functions. A limited amount of ISRP equipment was installed to allow for a full contingency of Legacy equipment for fallback in case of major problems during peak processing on the pilot system. ISRP processing staff consisted primarily of permanent or seasonal transcribers while Legacy processing was performed by primarily seasonal and new hire transcribers.

## **Review of the Integrated Submission and Remittance Processing (ISRP) System Software Development and Pilot Activities**

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The statistics and facts in the IAM are consistent with the findings of my staff during their analysis of the ISRP pilot results for the peak return processing period. However, I do not agree with the IAM recommendation to not include estimated ISRP DIS productivity savings in the FY 1999 and FY 2000 budget projections. While our analysis and pilot results were not conclusive, they did show that the ISRP system is more efficient than Legacy DIS and I support the projected 10% productivity improvement cited in the ISRP Business Case for FY 1999. However, the pilot did not provide the same level of confidence in the ISRP RRPS processing which resulted in our agreement to no productivity improvement for remittance processing until FY 2000. During FY 1999, the retention and analysis of comparative data between the pilot RRPS center and a center still processing on the Legacy RPS system will be used to determine productivity improvement for FY 2000.

If you have any questions or would like to discuss these issues further, please contact me at (202) 622-2875 or your staff may contact Walt McCrary at (202) 283-0091.

cc: Associate Commissioner for Modernization/Chief Information Officer IS  
Executive Officer for Service Center Operations OP:SC  
Director, Austin Service Center